

**Table A4. Residential Sector Key Indicators and Consumption**  
 (Quadrillion Btu per Year, Unless Otherwise Noted)

Key Indicators and Consumption	Reference Case							Annual Growth 2009-2035 (percent)	
	2008	2009	2015	2020	2025	2030	2035		
<b>Key Indicators</b>									
<b>Households (millions)</b>									
Single-Family .....	80.95	81.48	87.91	92.68	97.09	101.15	104.69	1.0%	
Multifamily .....	25.12	25.32	26.87	28.65	30.69	32.77	34.81	1.2%	
Mobile Homes .....	6.69	6.63	6.53	6.78	7.04	7.25	7.40	0.4%	
<b>Total</b> .....	<b>112.76</b>	<b>113.43</b>	<b>121.32</b>	<b>128.12</b>	<b>134.82</b>	<b>141.17</b>	<b>146.90</b>	<b>1.0%</b>	
<b>Average House Square Footage</b> .....	<b>1656</b>	<b>1669</b>	<b>1765</b>	<b>1831</b>	<b>1888</b>	<b>1938</b>	<b>1981</b>	<b>0.7%</b>	
<b>Energy Intensity</b> (million Btu per household)									
Delivered Energy Consumption .....	100.8	98.0	90.7	86.9	83.9	81.6	79.6	-0.8%	
Total Energy Consumption .....	191.0	185.8	168.6	163.3	159.8	157.4	155.3	-0.7%	
<b>(thousand Btu per square foot)</b>									
Delivered Energy Consumption .....	60.9	58.7	51.4	47.5	44.4	42.1	40.2	-1.5%	
Total Energy Consumption .....	115.3	111.3	95.5	89.2	84.6	81.2	78.4	-1.3%	
<b>Delivered Energy Consumption by Fuel</b>									
<b>Electricity</b>									
Space Heating .....	0.28	0.28	0.28	0.29	0.30	0.31	0.31	0.4%	
Space Cooling .....	0.87	0.83	0.82	0.85	0.90	0.95	0.99	0.7%	
Water Heating .....	0.43	0.43	0.47	0.49	0.50	0.49	0.48	0.4%	
Refrigeration .....	0.37	0.37	0.35	0.35	0.35	0.36	0.38	0.1%	
Cooking .....	0.10	0.11	0.12	0.12	0.13	0.14	0.15	1.3%	
Clothes Dryers .....	0.19	0.19	0.18	0.18	0.18	0.19	0.20	0.3%	
Freezers .....	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.4%	
Lighting .....	0.72	0.71	0.57	0.54	0.52	0.53	0.54	-1.0%	
Clothes Washers <sup>1</sup> .....	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-0.4%	
Dishwashers <sup>1</sup> .....	0.09	0.09	0.09	0.09	0.10	0.11	0.11	0.8%	
Color Televisions and Set-Top Boxes .....	0.33	0.34	0.33	0.34	0.36	0.39	0.42	0.8%	
Personal Computers and Related Equipment .....	0.17	0.18	0.17	0.17	0.18	0.19	0.19	0.3%	
Furnace Fans and Boiler Circulation Pumps .....	0.14	0.14	0.15	0.17	0.18	0.19	0.19	1.3%	
Other Uses <sup>2</sup> .....	0.89	0.88	0.94	1.05	1.17	1.30	1.42	1.9%	
<b>Delivered Energy</b> .....	<b>4.71</b>	<b>4.65</b>	<b>4.59</b>	<b>4.75</b>	<b>4.98</b>	<b>5.25</b>	<b>5.50</b>	<b>0.7%</b>	
<b>Natural Gas</b>									
Space Heating .....	3.40	3.28	3.27	3.29	3.28	3.29	3.27	-0.0%	
Space Cooling .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--	
Water Heating .....	1.33	1.33	1.38	1.40	1.39	1.37	1.32	-0.0%	
Cooking .....	0.22	0.22	0.22	0.23	0.23	0.24	0.24	0.5%	
Clothes Dryers .....	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.3%	
<b>Delivered Energy</b> .....	<b>5.00</b>	<b>4.87</b>	<b>4.93</b>	<b>4.97</b>	<b>4.96</b>	<b>4.95</b>	<b>4.89</b>	<b>0.0%</b>	
<b>Distillate Fuel Oil</b>									
Space Heating .....	0.56	0.50	0.48	0.43	0.39	0.36	0.33	-1.6%	
Water Heating .....	0.11	0.10	0.08	0.06	0.05	0.05	0.04	-3.4%	
<b>Delivered Energy</b> .....	<b>0.66</b>	<b>0.61</b>	<b>0.56</b>	<b>0.50</b>	<b>0.44</b>	<b>0.40</b>	<b>0.37</b>	<b>-1.9%</b>	
<b>Liquefied Petroleum Gases</b>									
Space Heating .....	0.26	0.26	0.23	0.22	0.21	0.20	0.19	-1.1%	
Water Heating .....	0.09	0.08	0.06	0.05	0.04	0.04	0.03	-3.5%	
Cooking .....	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-0.7%	
Other Uses <sup>3</sup> .....	0.14	0.16	0.17	0.18	0.20	0.21	0.23	1.5%	
<b>Delivered Energy</b> .....	<b>0.52</b>	<b>0.53</b>	<b>0.49</b>	<b>0.48</b>	<b>0.48</b>	<b>0.48</b>	<b>0.48</b>	<b>-0.4%</b>	
Marketed Renewables (wood) <sup>4</sup> .....	0.44	0.43	0.40	0.42	0.42	0.42	0.42	-0.1%	
Other Fuels <sup>5</sup> .....	0.03	0.03	0.03	0.03	0.02	0.02	0.02	-1.4%	

**Table A4. Residential Sector Key Indicators and Consumption (Continued)**  
 (Quadrillion Btu per Year, Unless Otherwise Noted)

Key Indicators and Consumption	Reference Case							Annual Growth 2009-2035 (percent)
	2008	2009	2015	2020	2025	2030	2035	
<b>Delivered Energy Consumption by End Use</b>								
Space Heating .....	4.97	4.78	4.70	4.68	4.63	4.60	4.55	-0.2%
Space Cooling .....	0.87	0.83	0.82	0.85	0.90	0.95	0.99	0.7%
Water Heating .....	1.96	1.95	1.99	2.00	1.98	1.94	1.88	-0.1%
Refrigeration .....	0.37	0.37	0.35	0.35	0.35	0.36	0.38	0.1%
Cooking .....	0.35	0.35	0.36	0.38	0.39	0.40	0.41	0.6%
Clothes Dryers .....	0.24	0.24	0.24	0.23	0.24	0.25	0.26	0.3%
Freezers .....	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.4%
Lighting .....	0.72	0.71	0.57	0.54	0.52	0.53	0.54	-1.0%
Clothes Washers <sup>1</sup> .....	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-0.4%
Dishwashers <sup>1</sup> .....	0.09	0.09	0.09	0.09	0.10	0.11	0.11	0.8%
Color Televisions and Set-Top Boxes .....	0.33	0.34	0.33	0.34	0.36	0.39	0.42	0.8%
Personal Computers and Related Equipment .....	0.17	0.18	0.17	0.17	0.18	0.19	0.19	0.3%
Furnace Fans and Boiler Circulation Pumps .....	0.14	0.14	0.15	0.17	0.18	0.19	0.19	1.3%
Other Uses <sup>6</sup> .....	1.03	1.03	1.11	1.23	1.37	1.51	1.65	1.8%
<b>Delivered Energy</b> .....	<b>11.36</b>	<b>11.12</b>	<b>11.00</b>	<b>11.14</b>	<b>11.31</b>	<b>11.52</b>	<b>11.69</b>	<b>0.2%</b>
<b>Electricity Related Losses</b> .....	<b>10.17</b>	<b>9.95</b>	<b>9.46</b>	<b>9.78</b>	<b>10.24</b>	<b>10.69</b>	<b>11.12</b>	<b>0.4%</b>
<b>Total Energy Consumption by End Use</b>								
Space Heating .....	5.59	5.39	5.28	5.29	5.25	5.23	5.17	-0.2%
Space Cooling .....	2.75	2.62	2.51	2.61	2.75	2.88	3.00	0.5%
Water Heating .....	2.89	2.88	2.96	3.01	3.00	2.94	2.85	-0.0%
Refrigeration .....	1.18	1.15	1.08	1.06	1.07	1.10	1.15	-0.0%
Cooking .....	0.58	0.58	0.60	0.63	0.66	0.69	0.71	0.8%
Clothes Dryers .....	0.65	0.64	0.62	0.60	0.61	0.63	0.66	0.1%
Freezers .....	0.25	0.25	0.24	0.24	0.25	0.26	0.26	0.3%
Lighting .....	2.28	2.23	1.74	1.64	1.59	1.60	1.63	-1.2%
Clothes Washers <sup>1</sup> .....	0.11	0.10	0.09	0.08	0.08	0.09	0.09	-0.6%
Dishwashers <sup>1</sup> .....	0.29	0.29	0.28	0.28	0.30	0.32	0.34	0.7%
Color Televisions and Set-Top Boxes .....	1.05	1.05	1.01	1.03	1.10	1.17	1.25	0.7%
Personal Computers and Related Equipment .....	0.55	0.56	0.52	0.53	0.54	0.56	0.58	0.2%
Furnace Fans and Boiler Circulation Pumps .....	0.43	0.44	0.47	0.51	0.55	0.57	0.59	1.1%
Other Uses <sup>6</sup> .....	2.94	2.91	3.06	3.39	3.78	4.16	4.52	1.7%
<b>Total</b> .....	<b>21.53</b>	<b>21.08</b>	<b>20.46</b>	<b>20.92</b>	<b>21.55</b>	<b>22.22</b>	<b>22.81</b>	<b>0.3%</b>
<b>Nonmarketed Renewables<sup>7</sup></b>								
Geothermal Heat Pumps .....	0.00	0.01	0.02	0.03	0.04	0.04	0.05	8.7%
Solar Hot Water Heating .....	0.00	0.00	0.00	0.00	0.00	0.01	0.01	2.0%
Solar Photovoltaic .....	0.00	0.00	0.04	0.04	0.04	0.05	0.05	9.7%
Wind .....	0.00	0.00	0.01	0.01	0.01	0.01	0.01	11.2%
<b>Total</b> .....	<b>0.01</b>	<b>0.01</b>	<b>0.07</b>	<b>0.09</b>	<b>0.09</b>	<b>0.10</b>	<b>0.11</b>	<b>8.3%</b>

<sup>1</sup>Does not include water heating portion of load.

<sup>2</sup>Includes small electric devices, heating elements, and motors not listed above.

<sup>3</sup>Includes such appliances as outdoor grills and mosquito traps.

<sup>4</sup>Includes wood used for primary and secondary heating in wood stoves or fireplaces as reported in the *Residential Energy Consumption Survey 2005*.

<sup>5</sup>Includes kerosene and coal.

<sup>6</sup>Includes all other uses listed above.

<sup>7</sup>Represents delivered energy displaced.

Btu = British thermal unit.

-- = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2008 and 2009 are model results and may differ slightly from official EIA data reports.

**Sources:** 2008 and 2009 based on: Energy Information Administration (EIA), *Annual Energy Review 2009*, DOE/EIA-0384(2009) (Washington, DC, August 2010).

**Projections:** EIA, AEO2011 National Energy Modeling System run REF2011.D120810C.